

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims.

**LISTING OF CLAIMS:**

Claims 1-39. Cancelled.

Claim ~~40~~<sup>1</sup>. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment, which recognizes a 150 kDA *T. equigenitalis* protein.

Claim ~~41~~<sup>7</sup>. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim ~~40~~<sup>1</sup>, in combination with at least one antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognize *T. equigenitalis* proteins selected from the group consisting of *T. equigenitalis* proteins of 120 kDA, 52.7 kDA and 22 (LPS) kDA.

<sup>23</sup>  
Claim ~~42~~. (Previously Presented) An isolated monoclonal antibody obtained by a process comprising:

fusing non-secreting murine myeloma cells with spleen cells  
from mice immunized against an inactivated strain of the  
species *T. equigenitalis* or extract(s) of such a strain,  
cloning and selecting according to the capacity of their culture  
supernatant to recognize a 150 kDA *T. equigenitalis*  
protein,  
recovering the required monoclonal antibody, and  
optionally purifying said monoclonal antibody.

<sup>2</sup>  
Claim ~~43~~. (Previously Presented) A method of obtaining a monoclonal antibody according to claim ~~40~~, comprising:

fusing non-secreting murine myeloma cells with spleen cells  
from mice immunized by means of a strain of the species  
*T. equigenitalis* or extract(s) from such a strain,  
screening hybridomas whose culture supernatants exhibit a  
positive reaction with a 150 kDA *T. equigenitalis* protein  
or a fragment thereof,  
selecting by cloning the hybridomas with respect to their  
reactivity, in relation to *T. equigenitalis*,  
recovering the monoclonal antibody, and  
optionally purifying said monoclonal antibody.

<sup>3</sup>  
Claim ~~44~~. (Previously Presented) A strain of hybridoma, which secretes a monoclonal antibody according to claim ~~40~~.

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Claim 45. (Currently Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed, which may contain *T. equigenitalis*, into contact with an effective quantity of a monoclonal antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof according to claim 40, under conditions permitting a reaction of the antigen-antibody type, and detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type,~~ wherein said product is indicative of the presence of a bacterium of the species *T. equigenitalis*.

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Claim 46. (Currently Amended) A method of diagnosis of an infection by *Taylorella equigenitalis* (*T. equigenitalis*) comprising:

(a) bringing a monoclonal antibody or fragment thereof according to claim 40, into contact with a biological sample, wherein said sample may contain *T. equigenitalis* antigen, under conditions permitting an antigen-antibody reaction, and

(b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~

in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,  
wherein said product is indicative of a diagnosis for *T. equigenitalis*  
infection.

<sup>12</sup>  
Claim ~~47~~. (Previously Presented) The method according to claim <sup>11</sup>~~45~~, further  
comprising blocking the non antigen-antibody reactions.

<sup>16</sup>  
Claim ~~48~~. (Previously Presented) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:  
a monoclonal antibody or fragment according to claim <sup>1</sup>~~40~~,  
a reagent for detecting the intended immunologic reaction,  
optionally, a reagent for blocking the non antigen-antibody  
reactions, and  
instructions for use.

Claim 49. Cancelled.

<sup>17</sup>  
Claim ~~50~~. (Previously Presented) A kit according to claim <sup>16</sup>~~48~~, wherein said  
reagent for carrying out the intended immunologic reaction is selected  
from the group consisting of markers and buffers.

<sup>18</sup>  
Claim ~~51~~. (Previously Presented) A kit according to claim <sup>16</sup>~~48~~, wherein a reagent for blocking the non antigenic-antibody reaction is included and said reagent is mouse serum.

<sup>13</sup>  
Claim ~~52~~. (Previously Presented) The method according to claim <sup>12</sup>~~47~~, wherein the non antigen-antibody reaction is blocked by saturation of the specimen obtained by means of a serum from which anti-*T. equigenitalis* antibodies have been removed.

<sup>15</sup>  
Claim ~~53~~. (Previously Presented) The method according to claim <sup>14</sup>~~46~~, further comprising blocking the non antigen-antibody reactions.

<sup>19</sup>  
Claim ~~54~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>1</sup>~~40~~, in combination with antibodies or Fv, Fab or F(ab')<sup>2</sup> fragments thereof which recognize *T. equigenitalis* proteins of 120 kDA, 52.7 kDA and 22 (LPS) kDA.

<sup>4</sup>  
Claim ~~55~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>1</sup>~~40~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 120 kDA *T. equigenitalis* protein.

<sup>5</sup>  
Claim ~~56~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>1</sup>~~40~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 52.7 kDA *T. equigenitalis* protein.

<sup>6</sup>  
Claim ~~57~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>1</sup>~~40~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 22 (LPS) kDA *T. equigenitalis* protein.

<sup>31</sup>  
Claim ~~58~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>23</sup>~~42~~, in combination with at least one antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a *T. equigenitalis* protein selected from the group consisting of *T. equigenitalis* proteins of 120 kDA, 52.7 kDA and 22 (LPS) kDA.

<sup>35</sup>  
Claim ~~59~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>23</sup>~~42~~, in combination with antibodies or Fv, Fab or F(ab')<sup>2</sup> fragments thereof which recognize *T. equigenitalis* proteins of 120 kDA, 52.7 kDA and 22 (LPS) kDA.

<sup>24</sup>  
Claim ~~60~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>23</sup>~~42~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 120 kDA *T. equigenitalis* protein.

<sup>25</sup>  
Claim ~~61~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>23</sup>~~42~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 52.7 kDA *T. equigenitalis* protein.

<sup>26</sup>  
Claim ~~62~~. (Previously Presented) An isolated monoclonal antibody or its Fv, Fab or F(ab')<sup>2</sup> fragment according to claim <sup>23</sup>~~42~~, in combination with an antibody or Fv, Fab or F(ab')<sup>2</sup> fragment thereof which recognizes a 22 (LPS) kDA *T. equigenitalis* protein.

<sup>27</sup>  
Claim ~~63~~. (Previously Presented) A strain of hybridoma, which secretes the monoclonal antibody according to claim <sup>23</sup>~~42~~.

<sup>8</sup>  
Claim ~~64~~. (Currently Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed, which may  
contain *T. equigenitalis*, into contact with an effective

quantity of the monoclonal antibodies or Fv, Fab or  
F(ab')<sup>2</sup> fragments thereof according to claim <sup>7</sup>~~41~~, under  
conditions permitting a reaction of the antigen-antibody  
type, and

detecting any antigen/antibody type reaction product formed

~~product formed in a reaction of the antigen-antibody type,~~

wherein said product is indicative of the presence of a bacterium of the  
species *T. equigenitalis*.

<sup>28</sup>  
Claim ~~65~~.

(Currently Amended) A method of identification of a bacterium of the  
species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a  
culture comprising:

bringing the specimen or the culture to be analyzed, which may

contain *T. equigenitalis*, into contact with an effective

quantity of the monoclonal antibody or Fv, Fab or F(ab')<sup>2</sup>

fragment thereof according to claim <sup>23</sup>~~42~~, under conditions

permitting a reaction of the antigen-antibody type, and

detecting any antigen/antibody type reaction product formed

~~product formed in a reaction of the antigen-antibody type,~~

wherein said product is indicative of the presence of a bacterium of the  
species *T. equigenitalis*.



<sup>20</sup>  
Claim ~~66~~.

(Currently Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed, which may contain *T. equigenitalis*, into contact with an effective quantity of the monoclonal antibodies or Fv, Fab or F(ab')<sup>2</sup> fragments thereof according to claim <sup>19</sup>~~64~~, under conditions permitting a reaction of the antigen-antibody type, and

detecting any antigen/antibody type reaction product formed

~~product formed in a reaction of the antigen-antibody type,~~

wherein said product is indicative of the presence of a bacterium of the species *T. equigenitalis*.

<sup>32</sup>  
Claim ~~67~~.

(Currently Amended) A method of identification of a bacterium of the species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a culture comprising:

bringing the specimen or the culture to be analyzed, which may contain *T. equigenitalis*, into contact with an effective quantity of the monoclonal antibodies or Fv, Fab or F(ab')<sup>2</sup> fragments thereof according to claim <sup>31</sup>~~58~~, under conditions permitting a reaction of the antigen-antibody type, and

detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type,~~  
wherein said product is indicative of the presence of a bacterium of the  
species *T. equigenitalis*.

<sup>36</sup>  
Claim ~~68~~.

(Currently Amended) A method of identification of a bacterium of the  
species *Taylorella equigenitalis* (*T. equigenitalis*) in a specimen or in a  
culture comprising:

bringing the specimen or the culture to be analyzed, which may  
contain *T. equigenitalis*, into contact with an effective  
quantity of the monoclonal antibodies or Fv, Fab or  
F(ab')<sup>2</sup> fragments thereof according to claim <sup>35</sup>~~59~~, under  
conditions permitting a reaction of the antigen-antibody  
type, and

detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type,~~  
wherein said product is indicative of the presence of a bacterium of the  
species *T. equigenitalis*.

<sup>9</sup>  
Claim ~~69~~.

(Currently Amended) A method of diagnosis of an infection by  
*Taylorella equigenitalis* (*T. equigenitalis*) comprising:

(a) bringing a monoclonal antibody or fragment thereof  
according to claim <sup>7</sup>~~41~~, into contact with a biological

sample, wherein said sample may contain *T. equigenitalis* antigen, under conditions permitting an antigen-antibody reaction, and

- (b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~  
in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,

wherein said product is indicative of a diagnosis for *T. equigenitalis* infection.

<sup>29</sup>  
Claim 70.

(Currently Amended) A method of diagnosis of an infection by  
*Taylorella equigenitalis* (*T. equigenitalis*) comprising:

- (a) bringing a monoclonal antibody or fragment thereof  
according to claim <sup>23</sup>~~42~~ into contact with a biological  
sample, wherein said sample may contain *T. equigenitalis*  
antigen, under conditions permitting an antigen-antibody  
reaction, and
- (b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~  
in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,

wherein said product is indicative of a diagnosis for *T. equigenitalis* infection.

<sup>21</sup>  
Claim ~~71~~.

(Currently Amended) A method of diagnosis of an infection by

*Taylorella equigenitalis* (*T. equigenitalis*) comprising:

- (a) bringing a monoclonal antibody or fragment thereof  
according to claim <sup>19</sup>~~54~~, into contact with a biological  
sample, wherein said sample may contain *T. equigenitalis*  
antigen, under conditions permitting an antigen-antibody  
reaction, and
- (b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~  
in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,

wherein said product is indicative of a diagnosis for *T. equigenitalis*  
infection.

<sup>33</sup>  
Claim ~~72~~.

(Currently Amended) A method of diagnosis of an infection by

*Taylorella equigenitalis* (*T. equigenitalis*) comprising:

- (a) bringing a monoclonal antibody or fragment thereof  
according to claim <sup>31</sup>~~58~~, into contact with a biological  
sample, wherein said sample may contain *T. equigenitalis*  
antigen, under conditions permitting an antigen-antibody  
reaction, and

- (b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~  
in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,

wherein said product is indicative of a diagnosis for *T. equigenitalis*  
infection.

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Claim ~~73~~.

(Currently Amended) A method of diagnosis of an infection by  
*Taylorella equigenitalis* (*T. equigenitalis*) comprising:

- (a) bringing a monoclonal antibody or fragment thereof  
according to claim ~~58~~<sup>35</sup>, into contact with a biological  
sample, wherein said sample may contain *T. equigenitalis*  
antigen, under conditions permitting an antigen-antibody  
reaction, and
- (b) detecting any antigen/antibody type reaction product formed  
~~product formed in a reaction of the antigen-antibody type~~  
in said sample between the antibody or fragment of (a)  
and a *T. equigenitalis* antigen,

wherein said product is indicative of a diagnosis for *T. equigenitalis*  
infection.

<sup>10</sup>  
Claim ~~74~~. (Currently Amended) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:  
the a monoclonal antibody or fragment ~~antibodies or fragments~~  
according to claim ~~41~~,  
reagents for detecting the intended immunologic reaction,  
optionally, reagents for blocking the non antigen-antibody  
reactions, and  
instructions for use.

<sup>30</sup>  
Claim ~~75~~. (Previously Presented) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:  
<sup>23</sup>  
a monoclonal antibody or fragment according to claim ~~42~~,  
reagents for detecting the intended immunologic reaction,  
optionally, reagents for blocking the non antigen-antibody  
reactions, and  
instructions for use.

<sup>22</sup>  
Claim ~~76~~. (Currently Amended) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:  
the a monoclonal antibody or fragment ~~antibodies or fragments~~  
according to claim <sup>19</sup>~~54~~,  
reagents for detecting the intended immunologic reaction,

optionally, reagents for blocking the non antigen-antibody  
reactions, and  
instructions for use.

<sup>34</sup>  
Claim ~~77~~

(Currently Amended) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:

the a monoclonal antibody or fragment ~~antibodies or fragments~~  
according to claim <sup>31</sup>~~58~~,

reagents for detecting the intended immunologic reaction,  
optionally, reagents for blocking the non antigen-antibody  
reactions, and  
instructions for use.

<sup>38</sup>  
Claim ~~78~~

(Currently Amended) A kit for application of a method of  
identification of a bacterium of the species *Taylorella equigenitalis*  
(*T. equigenitalis*) in a specimen or in a culture comprising:

the a monoclonal antibody or fragment ~~antibodies or fragments~~  
according to claim <sup>35</sup>~~59~~,

reagents, for detecting the intended immunologic reaction,  
optionally, reagents for blocking the non antigen-antibody  
reactions, and  
instructions for use.

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Claims 79-83 Cancelled.